

FIG. 1

Mach-Zehnder Device Transfer Function

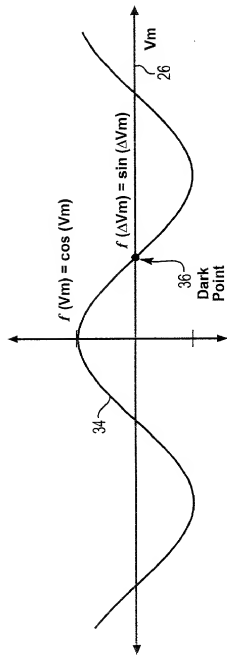


FIG. 3

12

Modulation Synthesizer

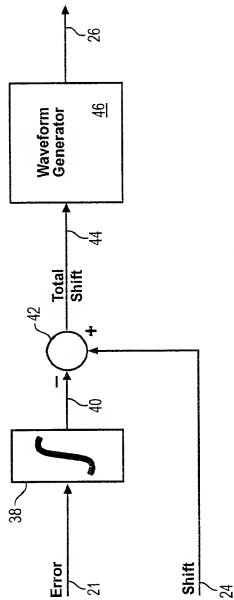


FIG. 4

12b

Quadrature Modulation Synthesizer (With On/Off Data Keying)

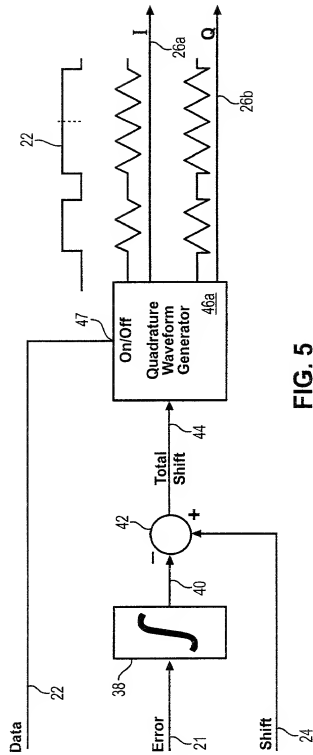


FIG. 5

Phase Modulation Device

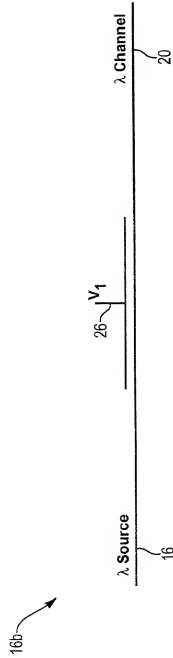


FIG. 6

12c

Modulation Synthesizer (With Frequency Shift Keying)

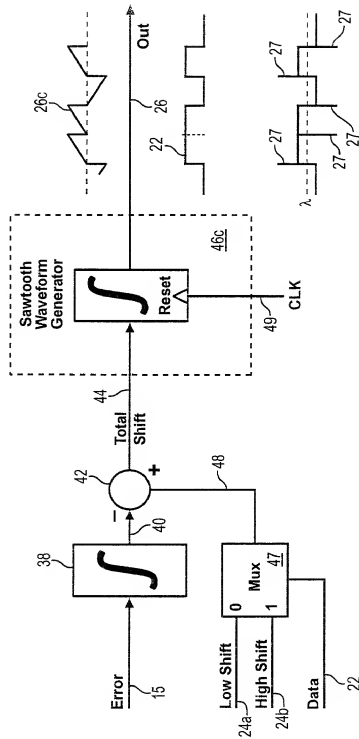


FIG. 7

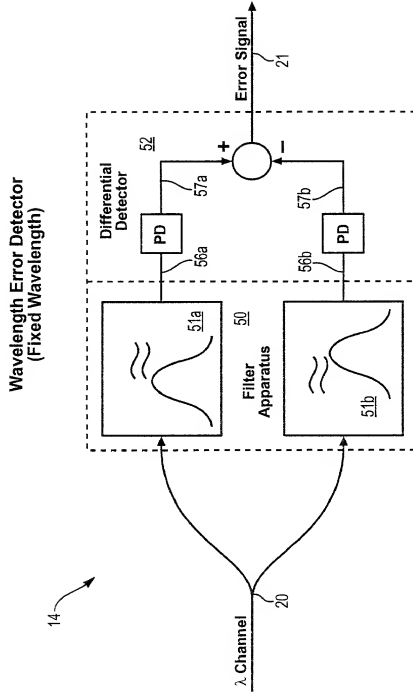


FIG. 8

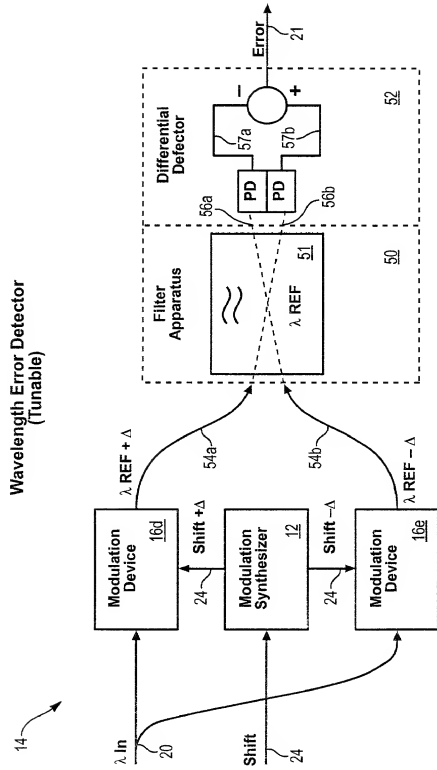


FIG. 9

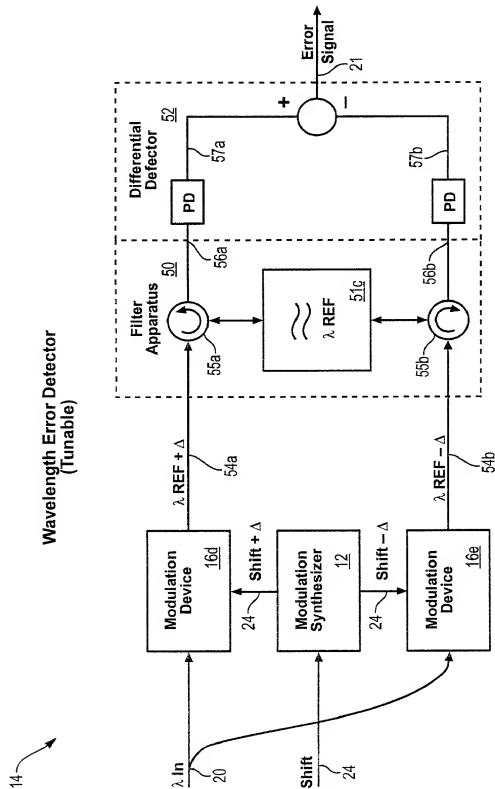


FIG. 10

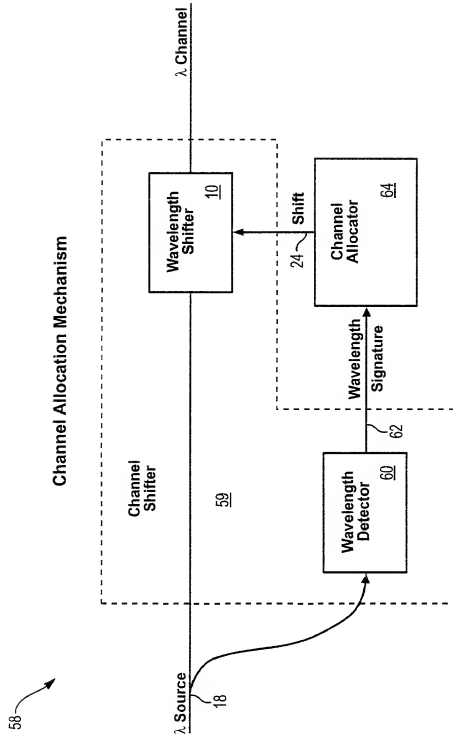


FIG. 11

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Tunable Wavelength Stabilized Transmitter

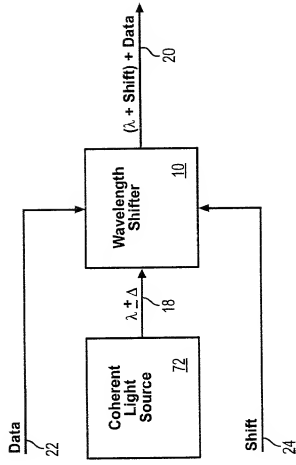


FIG. 12

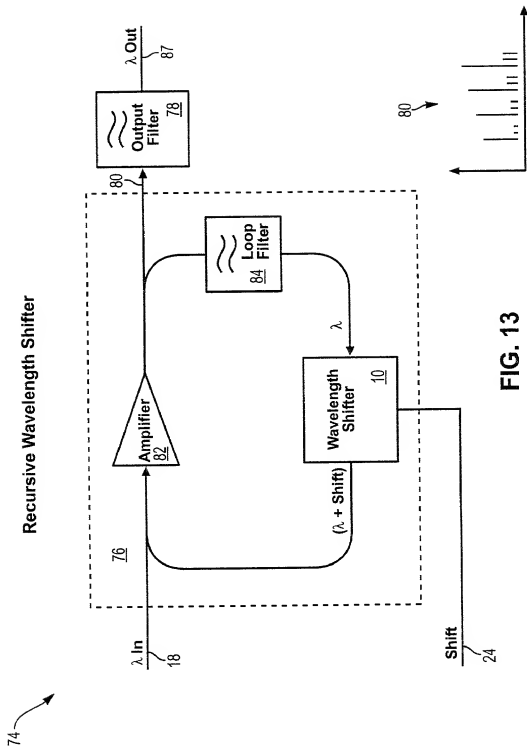


FIG. 13

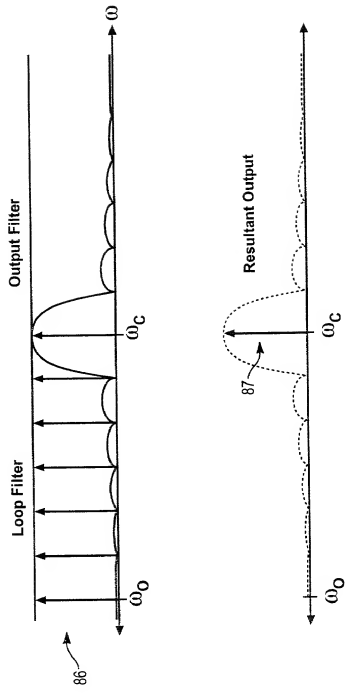


FIG. 14

Full-Duplex Photonic Signals

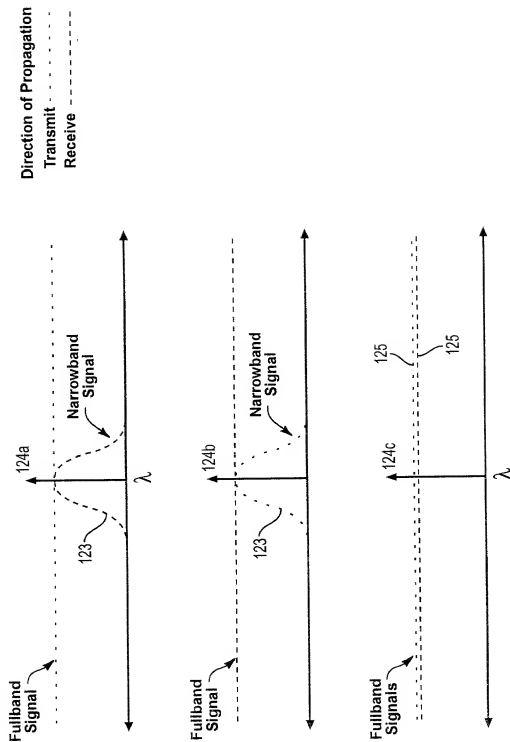


FIG. 16

Full-Duplex Narrowband Filters

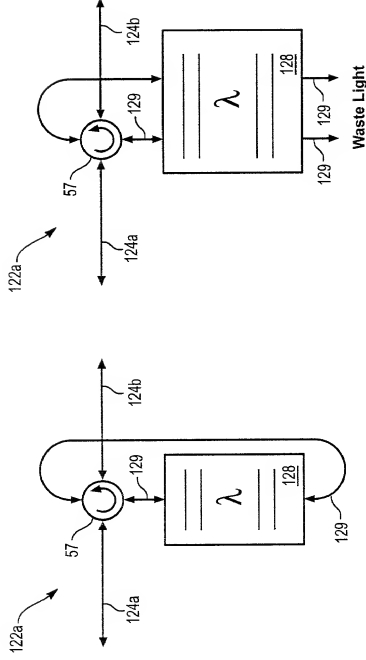


FIG. 18a

FIG. 18b

Pseudo Full-Duplex Narrowband Filter

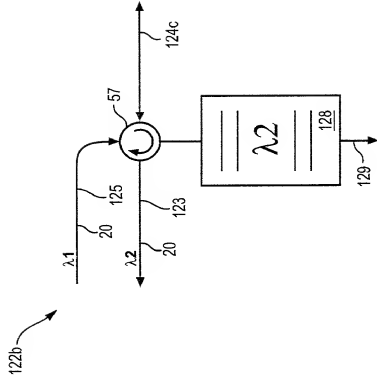


FIG. 19

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Full-Duplex Crossbar Switch

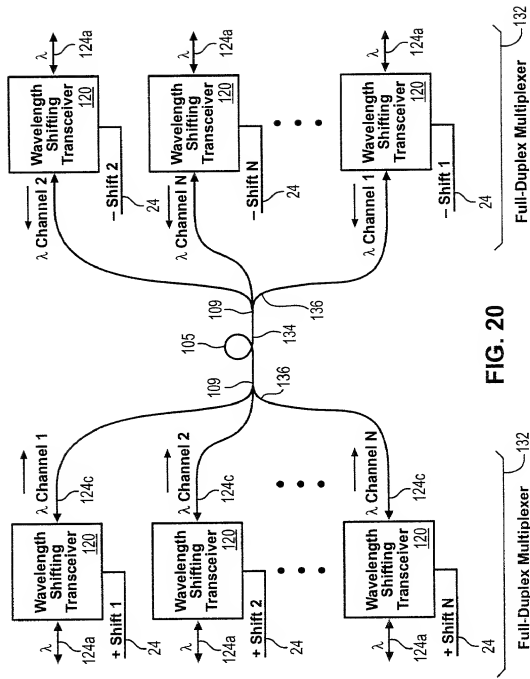


FIG. 20

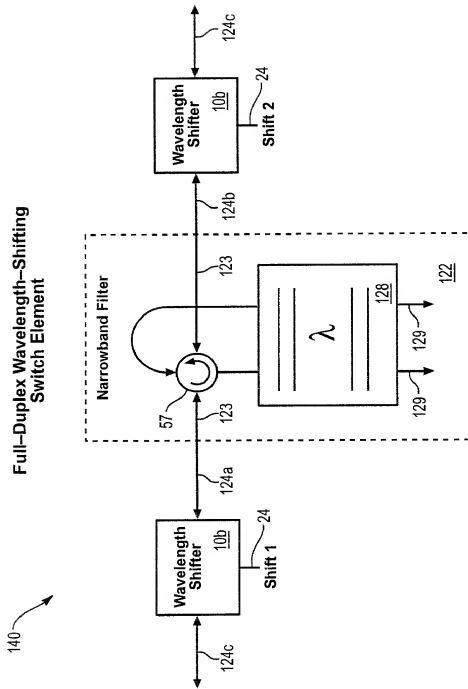


FIG. 21

Full-Duplex Wavelength-Shifting Switch

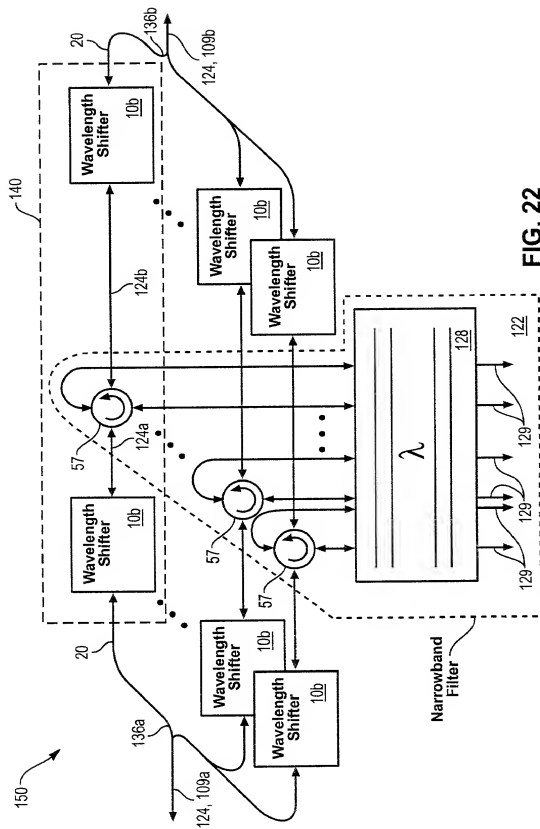


FIG. 22

160

Replicated-Spectrum Transceiver

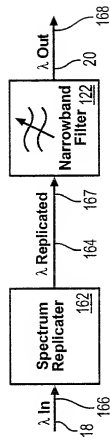


FIG. 23

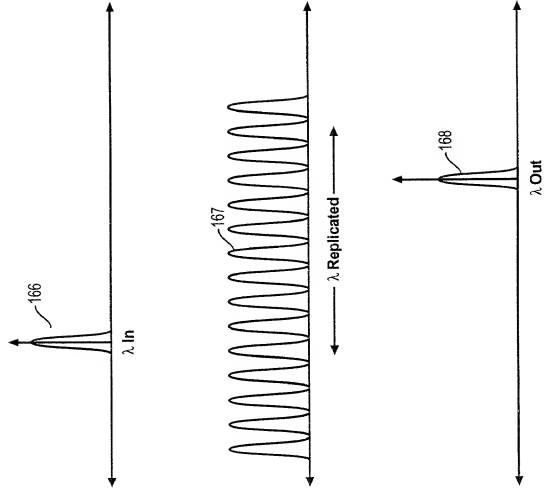


FIG. 24

Recursive Wavelength-Shifting Replicator

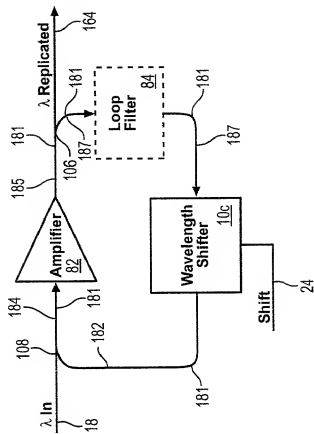


FIG. 26

190

Four-Wave-Mixing Replicator

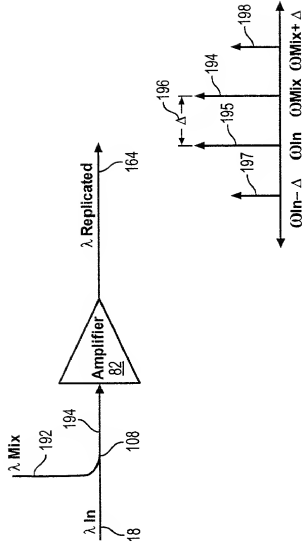
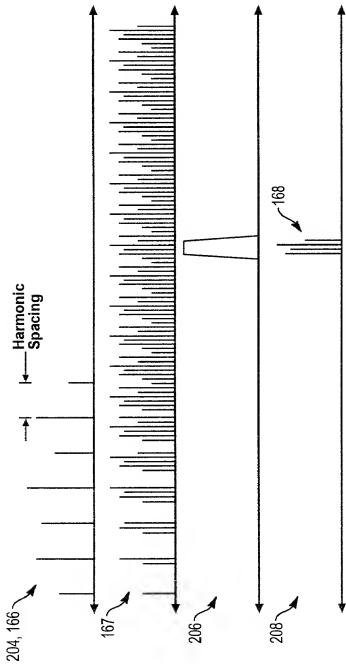
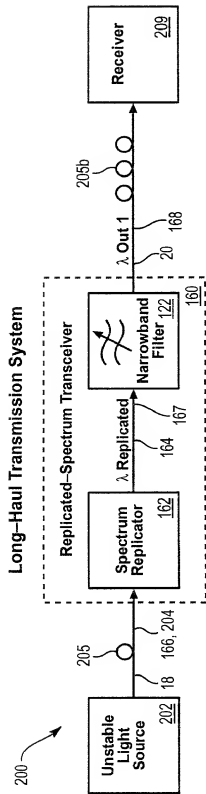
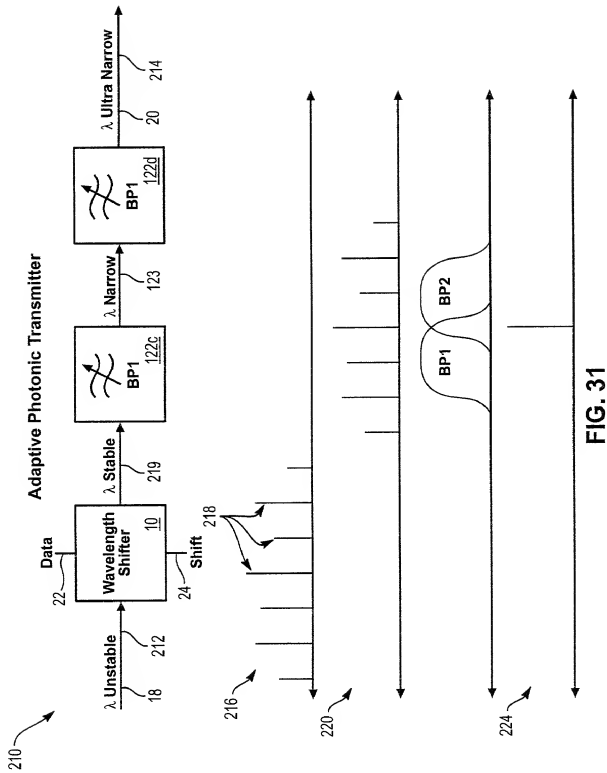


FIG. 28





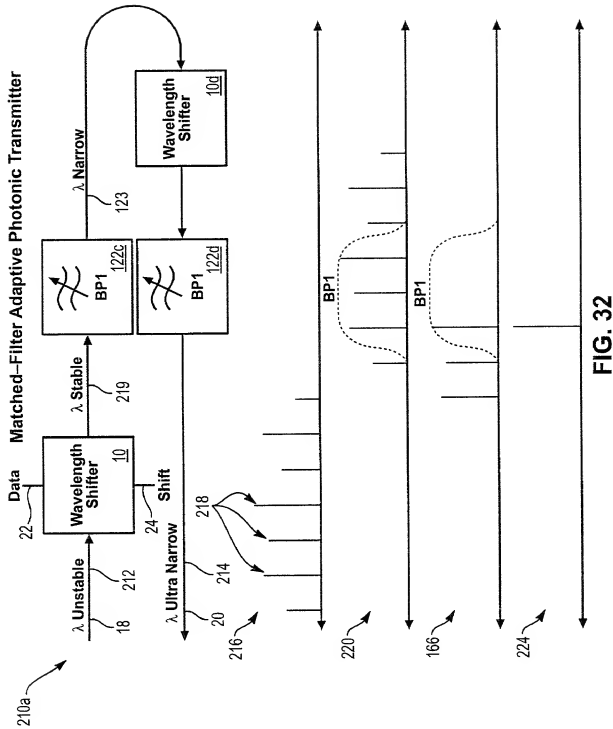


FIG. 32